

REMARKS

Claims 1-5 and 7-9 are pending. Claims 1-4 and 9 are currently amended. These amendments are supported throughout the specification, including the original claims.

The following remarks are in response to the Office Action mailed August 4, 2009.

Claim Status

Claims 1-5 and 7-9 stand rejected under 35 U.S.C. § 103 as unpatentable over Imai (U.S. Pat. No. 6,771,882) in view of Hori (U.S. Pat. No. 5,991,504) in further view of Fisher (U.S. Pat. No. 7,133,068) and in even further view of Morita (U.S. Pat. No. 6,584,463).

Claim 1 has been amended, and now requires a recording apparatus comprising: (a) an imaging unit configured to image an object and output moving image data; (b) a memory configured to store image data of one frame of the moving image data output from the imaging unit; (c) a compressing unit configured to compress information quantity of the moving image data output from the imaging unit and information quantity of the image data of one frame stored in the memory; (d) a recording unit configured to move a magnetic tape and record the moving image data output from the compressing unit and repeatedly record the image data of the same one frame output from the compression unit as still image data in a plurality of tracks formed on the magnetic tape, wherein the recording unit records the moving image data and the still image data so that the image data of one frame is recorded in an n number of tracks (n is an integer of 1 or more) on the magnetic tape in a first recording mode for recording moving image data and still image data each having a first information quantity per one frame and records the image data and the still image data so that the image data of one frame is recorded in an m number of tracks (m is an integer greater than n) on the magnetic tape in a second recording mode for recording moving image data and still image data each having a second information quantity larger than the first information quantity per one frame; (e) a recording mode setting unit configured to set a recording mode of the recording apparatus between the first and the second recording mode; (f) an instruction unit configured to provide a still image recording instruction to record a still image; and (g) a

control unit configured to control the recording unit so as to start recording repeatedly on the magnetic medium still image data of the same one frame in response to the still image recording instruction provided by the instruction unit and to stop recording repeatedly the still image data of the same one frame after the still image data of the same one frame is repeatedly recorded on the magnetic tape a predetermined number of times.

The control unit of claim 1 changes the predetermined number of times of repeatedly recording the still image data, in accordance with the recording mode set by the recording mode setting unit. Moreover, the control unit controls the recording unit such that if the second recording mode is set by the recording mode setting unit, recording repeatedly the still image data of the same one frame is stopped after the still image data of the same one frame is repeatedly recorded on the magnetic tape a second predetermined number of times in response to the still image recording instruction, and if the first recording mode is set by the recording mode setting unit, recording repeatedly the still image data of the same one frame is stopped after the still image data of the same one frame is repeatedly recorded on the magnetic tape a first predetermined number of times larger than the second predetermined number of times in response to the still image recording instruction.

Claim Rejections – 35 U.S.C. § 103

Claims 1-5 and 7-9 stand rejected under 35 U.S.C. § 103 as unpatentable over Imai in view of Hori in further view of Fisher and in even further view of Morita. These rejections are respectfully traversed, for the reasons provided below.

First, as explained above, claim 1 has been amended and now requires a recording apparatus that records moving image data and still image data of the same one frame of the moving image data in a plurality of tracks formed on the magnetic tape, is arranged to change a predetermined number of times of repeatedly recording the still image data, in accordance with a recording mode set and control the recording of the image data in accordance with the recording mode such that if a second recording mode is set, recording repeatedly the still image data of the same one frame is stopped after the still image data of

the same one frame is repeatedly recorded on the magnetic tape a second predetermined number of times in response to the still image recording instruction, and if a first recording mode is set, recording repeatedly the still image data of the same one frame is stopped after the still image data of the same one frame is repeatedly recorded on the magnetic tape a first predetermined number of times larger than the second predetermined number of times in response to the still image recording instruction.

That is, the recording apparatus of the claimed invention has the first and second recording modes of the moving image data and still image data and records the still image data in accordance with the recording mode such that the still image data of the same one frame is repeatedly recorded on the magnetic tape the second predetermined number of times in the second recording mode and is repeatedly recorded on the magnetic tape the first predetermined number of times larger than the second predetermined number of times in the first recording mode. In this connection, note that the first and second recording modes correspond to SDL and SD modes, respectively. According to the DV format, 30 frames of the image data are recorded per one second, and thus in the SD mode, the still image data of same one frame is repeatedly recorded so that 195 frames (times) (i.e., 30 frames x 6.5 seconds) of the still image data of the same one frame are recorded. In the SDL mode, 255 frames (times) (i.e., 30 frames x 8.5 seconds) of the still image data of the same one frame are eventually recorded. Accordingly, the claimed first and second predetermined numbers of times correspond to 225 and 195, respectively. According to the claimed invention, since still image data recording area which has enough length in the magnetic tape traveling direction can be provided on the tape, it can be also attained in the SDL mode to easily search the still image data recorded on the magnetic tape on which the moving image data is also recorded.

The above-described feature of the claimed invention is not taught by either of the cited references (Imai, Hori, Fisher and Morita), and thus cannot be taught by a combination of those references.

The Office Action admits that each of Imai, Hori and Fisher fails to teach a relationship between recording modes and repeated recording period of still image data, and

asserts that Morita teaches such a relationship. Applicant respectfully disagrees.

Morita extracts still images from stored video images in accordance with settings provided in a setting table shown in FIG. 3. The settings include different extraction intervals in terms of “frame” and “time.” However, Morita fails to disclose to repeatedly record the still image data of same one frame on the magnetic tape a second predetermined number of times in a second recording mode in which the moving image data is also recorded, and repeatedly record the still image data of the same one frame a first predetermined number of times larger than the second predetermined number of times in the first recording mode, while amended claim 1 clearly recites this still image data recording structure. That is, the reference of Morita is silent on the number of times of repeatedly recording the still image data of one same frame and thus fails to disclose to change such number of times in accordance with the recording mode.

In view of the foregoing, none of the cited references of Imai, Hori, Fisher, and Morita discloses or suggests the control unit functioning together with the recording unit and the instruction unit as clearly recited in amended independent claim 1. Therefore, the cited references, even when each taken alone or in combination, do not teach the invention recited in amended claim 1 and its dependent claims. Independent claim 9, as amended, also recites the above features, so the above discussion also is applicable to claim 9.

Second, the Office Action improperly dissects claim 1 into isolated components, asserts that each of those separate components is in the prior art, and then based on those assertions concludes that the invention of claim 1 is obvious. While this approach makes rejecting claims very easy, it cannot be the proper approach. Almost all inventions are comprised of various elements that can be found in the prior art. What makes them inventions in many cases is the fact that they are novel combinations of those prior art elements.

Recognizing this critical fact, the MPEP states: “In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a

whole would have been obvious.” MPEP 2141.02. The Office Action’s rejections are not in compliance with this requirement – at no point is the invention as a whole even discussed.

Third, the Office Action’s combination of the four disparate references relied upon is improper. The Office Action’s asserted motivation to combine those references (“to provide for improved video images”) is a classic example of a conclusory statement that lacks support – i.e., that lacks articulated reasoning with some rational underpinning, as required by MPEP 2142 and the U.S. Supreme Court’s recent *KSR* decision.

The assertion that one skilled in the art would be motivated to combine the teachings of Imai with those of Hori, Fisher, and Morita “to provide for improved video images” fails the KSR test for at least two reasons: (a) the assertion is too generic to teach any specific combination of references (indeed, the same justification is offered in order to support a different combination – that of Fisher with Imai and Hori); and (b) the assertion is not supported by any articulated reasoning – the Office Action provides no explanation of how the combination of those four references results in “improved video images.”

In light of the above, Applicant respectfully requests reconsideration and withdrawal of all pending claim rejections.

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Respectfully submitted,



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